

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for ~~the~~ producing a flexographic printing plate, which has a base layer and a layer of a light sensitive material attached to the base layer, comprising producing an image on the layer of the light sensitive material by selective crosslinking, by insulating zones which are to be crosslinked with amplitude modulated laser light having a wavelength of 390 to 410 nm, and sweeping the layer of the light sensitive material with the laser light, and, thereafter, removing zones which are not crosslinked, wherein the layer of light sensitive material includes SBS, SIS, or SEBS.

2. (Previously Presented) The method according to Claim 1, including producing the laser light with a laser source consisting of a bundle of diodes producing laser light at wavelengths around 405 nm.

3. (Previously Presented) The method according to Claim 1, including removing the zones which are not crosslinked by liquefying the zones which are not crosslinked thermally, without using solvents.

4. (Previously Presented) The method according to Claim 3, wherein the light sensitive material not crosslinked by the laser light has a variation in viscosity in a temperature range from 60 to 140°C, and the zones that are crosslinked melt at a temperature higher than the temperature range.

5. (Previously Presented) The method according to Claim 1, wherein the light sensitive material contains at least one selected from the group consisting of high molecular weight polymers, functionalized monomers or oligomers, photo-initiators, reactive or non-reactive diluents, inhibitors and protective agents, and pigments.

6. (Previously Presented) The method according to Claim 1, wherein the light sensitive material is a photo-polymer containing at least two complementary crosslinking systems.

7. (Previously Presented) A method according to Claim 6, wherein a main system is used to create an image.

8. (Previously Presented) The method according to Claim 6, including using a complementary system to complete the crosslinking and to increase chemical and mechanical resistance.

9. (Previously Presented) The method according to Claim 6, including using a complementary system to generate different compressibilities.

10. (Previously Presented) The method according to Claim 6, including partially crosslinking the photo-polymer to adjust viscosity and prevent cold creep during prolonged storage periods or transport.

11. (Previously Presented) The method according to Claim 6, including sensitizing the photo-polymer with a flash of light before writing an image with the laser light.

12. (Previously Presented) The method according to Claim 1, wherein the light sensitive material is a polymer with a hardness between 60 and 70 ShA.

13. (Previously Presented) The method according to Claim 1, including insolating the light sensitive material with an energy in a range from 20 to 1000 mJ/cm².

14. (Previously Presented) The method according to Claim 1, including thermally projecting pre-formulated powders onto a support sleeve to produce the plate.

15. (Previously Presented) The method according to Claim 1, including insolating the light sensitive material with a plurality of lasers operating in parallel.

16. (Currently Amended) A flexographic printing plate obtained according to Claim 1, comprising tubular sleeve on a rigid support having a composite base and, attached on the base, the layer of light sensitive material ~~which~~, wherein the layer of light sensitive material is free of solvents and includes SBS, SIS, or SEBS.

17. (Previously Presented) The flexographic printing plate according to Claim 16, wherein the composite base has a thickness in a range from 0.2 to 40 mm.

18. (Previously Presented) The flexographic printing plate according to Claim 16, wherein the layer of the light sensitive material has a thickness in a range from 0.5 to 2 mm.

19. (Previously Presented) The flexographic printing plate according to Claim 16, wherein the sleeve includes a compressible layer.

20. (Previously Presented) The flexographic printing plate according to Claim 16, including a second sleeve containing an inserted layer for variation of thickness of the sleeve.

21. (Previously Presented) The flexographic printing plate according to Claim 20, wherein the inserted layer is compressible.

22. (Previously Presented) The flexographic printing plate according to Claim 16, wherein the tubular sleeve is extruded.

23. (Previously Presented) The flexographic printing plate according to Claim 16, wherein the tubular sleeve is produced by rolling and attachment of a plate to a support cylinder or sleeve.

24. (Previously Presented) The flexographic printing plate according to Claim 16, wherein the tubular sleeve is produced by thermally projecting pre-formulated powders onto a support cylinder or sleeve.

25. (Previously Presented) The flexographic printing plate according to Claim 16, wherein the rigid support includes a base made of polyester film.

26. (Currently Amended) The flexographic printing plate according to Claim 16, including a plurality of ~~the~~ layers of light sensitive material.

27. (Previously Presented) The flexographic printing plate according to Claim 16, wherein the flexographic printing plate is etchable with one of water, an aqueous solution under pressure, high temperature, and brushing.